## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of	)
Luis GRAVANO et al.	) Group Art Unit: 2165
Application No.: 09/939,661	) Examiner: Jacques Veillard
Filed: August 28, 2001	)
For: SYSTEMS AND METHODS FOR USING ANCHOR TEXT AS PARALLEL CORPORA FOR CROSS-LANGUAGE INFORMATION RETRIEVAL	) ) ) )

## COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE

U.S. Patent and Trademark Office Customer Window, Mail Stop: Amendment Randolph Building 401 Dulany Street Alexandria, VA 22314

Sir:

In response to the Statement of Reasons for Allowance contained in the Notice of Allowance dated May 30, 2006, Applicants submit the following remarks:

Remarks begin on page 2 of this paper.

## REMARKS

Applicants note with appreciation the Examiners allowance of claims 1-29. Applicants, however, submit the following comments regarding the Examiner's "Reasons for Indicating Allowable Subject Matter" stated on pages 3 and 4 of the Notice of Allowance.

In the Reasons for Allowance, the Examiner indicated, with respect to claims 1, 11, 14, 15, 20, 21 and 23, that the art of record does not teach or suggest "instructions for finding documents in a first language that contain links having associated content that matches the terms of a search query, wherein the links refer to documents in a second language, and instructions for disambiguating among the possible translations of the terms of the search query using the identified documents to translate the search query into the second language." The Examiner further indicated, with respect to claims 18, 19, 22, 24 and 25, that the art of record does not teach or suggest "performing a search of documents in a first language to locate one or more of a first language documents that match the search query, identifying documents in a second language that contain links that refer to the one or more first language documents, determining possible translations of the terms of the search query into a second language, using the identified second language documents as parallel corpora for disambiguation among the possible translations of the terms of the search query, identifying one of the possible translations as a correct translation of the search query based on the disambiguation and performing a search of second language documents using the correct translation of the search query."

Applicants note that the claim features addressed in the Reasons for Allowance do not necessarily correspond identically to the features recited in the various allowed claims. For example, claim 1 recites the following combination of features not disclosed or suggested by the

art of record: "An automated method for performing cross-language query translation, comprising: receiving a search query that includes terms in a first language; determining possible translations of the terms of the search query into a second language; locating documents in the first language that contain links having associated content that matches the terms of the search query, the links referring to documents in the second language; and disambiguating among the possible translations of the terms of the search query using the documents in the second language to identify one of the possible translations as a likely translation of the search query."

Claim 10 further recites the following combination of features not disclosed or suggested by the art of record: "A system for performing cross-language query translation, comprising: means for obtaining a search query that includes terms in a first language; means for performing an initial translation of the terms of the search query into a second language, the initial translation identifying one or more possible translations of the terms of the search query; means for searching a database to locate documents in the first language that contain links having associated content that matches the terms of the search query, the links referring to documents in the second language; and means for disambiguating among the possible translations of the terms of the search query using the documents in the second language to identify one of the possible translations as a correct translation of the search query into the second language."

Claim 11 also recites the following combination of features not disclosed or suggested by the art of record: "A system for translating search queries, comprising: a database of documents in a plurality of languages; a search engine configured to: receive a search query that includes terms in a first language, and search the database to locate documents in the first language that contain links having associated content that matches the terms of the search query, the links

referring to documents in a second language; and a query translation engine configured to: receive the search query, determine possible translations of the terms of the search query into the second language, and disambiguate among the possible translations of the terms of the search query using the documents in the second language to identify one of the possible translations as a likely translation of the search query."

Claim 14 further recites the following combination of features not disclosed or suggested by the art of record: "A computer-readable medium that stores instructions executable by one or more processing devices to perform a method for translating a search query, comprising: instructions for obtaining a search query that includes terms in a first language; instructions for determining possible translations of the terms of the search query into a second language; instructions for finding documents in the first language that contain links having associated content s that matches the terms of the search query, the links referring to documents in the second language; and instructions for disambiguating among the possible translations of the terms of the search query using the identified documents to translate the search query into the second language."

Claim 15 additionally recites the following combination of features not disclosed or suggested by the art of record: "A system for translating search queries, comprising: a search engine configured to: receive a search query that includes one or more terms in a first language, and locate documents in the first language that contain links having anchor text that matches the terms of the search query, the anchor text referring to documents in a second language; and a query translation engine configured to: receive the search query, initially translate the search query to determine possible translations of the terms of the search query into the second

language, and disambiguate among the possible translations of the terms of the search query using the documents in the second language to identify one of the possible translations as a correct translation of the search query."

Claim 18 further recites the following combination of features not disclosed or suggested by the art of record: "A method for performing cross-language document retrieval, comprising: receiving a search query that includes one or more terms in a first language; performing a search of documents in the first language to locate one or more of the first language documents that contain links having anchor text that matches the search query, the anchor text referring to one or more documents in a second language; determining possible translations of the terms of the search query into the second language; using the second language documents as parallel corpora for disambiguation among the possible translations of the terms of the search query; identifying one of the possible translations as a correct translation of the search query based on the disambiguation; and performing a search of second language documents using the correct translation of the search query."

Claim 19 further recites the following combination of features not disclosed or suggested by the art of record: "A system for performing cross-language document retrieval, comprising: a search engine configured to: receive a search query that includes one or more terms in a first language, perform a search of documents in the first language to locate one or more of the first language documents that contain links having anchor text that matches the search query, the anchor text referring to one or more documents in a second language; a query translation engine configured to: determine possible translations of the terms of the search query into the second language, use the second language documents as parallel corpora for disambiguation among the

possible translations of the terms of the search query, identify one of the possible translations as a correct translation of the search query based on the disambiguation, and provide the correct translation of the search query to the search engine to permit the search engine to perform a search of second language documents based on the correct translation of the search query."

Claim 20 also recites the following combination of features not disclosed or suggested by the art of record: "An automated method for performing cross-language query translation, comprising: receiving a search query that includes terms in a first language; determining possible translations of the terms of the search query into a second language; locating documents in the first language that contain links having associated content That matches the terms of the search query, the links referring to other documents in the first language; identifying documents in the second language that contain links that refer to the other documents; and disambiguating among the possible translations of the terms of the search query using the identified documents to identify one of the possible translations as a likely translation of the search query."

Claim 21 further recites the following combination of features not disclosed or suggested by the art of record: "A system for performing cross-language query translation, comprising: a search engine configured to: receive a search query that includes terms in a first language, locate documents in the first language that contain links having associated content that matches the terms of the search query, the links referring to other documents in the first language, and identify documents in a second language that contain links that refer to the other documents; and a query translation engine configured to: determine possible translations of the terms of the

search query into the second language, and disambiguate among the possible translations of the terms of the search query using the identified documents to identify one of the possible translations as a likely translation of the search query."

Claim 22 also recites the following combination of features not disclosed or suggested by the art of record: "A method for performing cross-language document retrieval, comprising: receiving a search query that includes one or more terms in a first language; performing a search of documents in the first language to locate one or more of the first language documents that contain links that include anchor text that matches the search query, the anchor text referring to one or more other documents in the first language; identifying documents in a second language that contain links that refer to the one or more other first language documents; determining possible translations of the terms of the search query into the second language; using the identified second language documents as parallel corpora for disambiguation among the possible translations of the terms of the search query; identifying one of the possible translations as a correct translation of the search query based on the disambiguation; and performing a search of second language documents using the correct translation of the search query."

Claim 23 further recites the following combination of features not disclosed or suggested by the art of record: "An automated method for performing cross-language query translation, comprising: receiving a search query that includes terms in a first language; determining possible translations of the terms of the search query into a second language; locating documents in the first language that match the terms of the search query; identifying documents in the second language that contain links that refer to the first language documents; and disambiguating among the possible translations of the terms of the search query using the second language documents."

Claim 24 additionally recites the following combination of features not disclosed or suggested by the art of record: "A system for performing cross-language query translation, comprising: a search engine configured to: receive a search query that includes terms in a first language, locate documents in the first language that match the terms of the search query, and identify documents in a second language that contain links that refer to the first language documents; and a query translation engine configured to: determine possible translations of the terms of the search query into the second language, and disambiguate among the possible translations of the terms of the search query using the second language documents to identify one of the possible translations as a likely translation of the search query."

Claim 25 further recites the following combination of features not disclosed or suggested by the art of record: "A method for performing cross-language document retrieval, comprising: receiving a search query that includes one or more terms in a first language; performing a search of documents in the first language to locate one or more of the first language documents that match the search query; identifying documents in a second language that contain links that refer to the one or more first language documents; determining possible translations of the terms of the search query into the second language; using the identified second language documents as parallel corpora for disambiguation among the possible translations of the terms of the search query; identifying one of the possible translations as a correct translation of the search query based on the disambiguation; and performing a search of second language documents using the correct translation of the search query."

Applicants submit that, notwithstanding the Reasons for Allowance contained in the Notice of Allowance, it is the novel and non-obvious combination of features recited in

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independent claims 1, 10, 11, 14, 15, 19, 20, 21, 22, 23, 24 and 25 that distinguish these claims

over the art of record.

To the extent necessary, a petition for an extension of time under 37 CFR § 1.136 is

hereby made. Please charge any shortage in fees due in connection with the filing of this

paper, including extension of time fees, to Deposit Account No. 50-1070 and please credit any

excess fees to such deposit account.

Respectfully submitted,

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